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International Bureau

## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification <sup>6</sup> :</b> <b>B29C 45/76, 45/77</b>	<b>A1</b>	<b>(11) International Publication Number:</b> <b>WO 99/41057</b> <b>(43) International Publication Date:</b> 19 August 1999 (19.08.99)
<b>(21) International Application Number:</b> PCT/AU99/00067 <b>(22) International Filing Date:</b> 29 January 1999 (29.01.99) <b>(30) Priority Data:</b> PP 1768 12 February 1998 (12.02.98) AU <b>(71) Applicant (for all designated States except US):</b> MOLDFLOW PTY. LTD. [AU/AU]; 259-261 Colchester Road, Kilsyth, VIC 3137 (AU). <b>(72) Inventor; and</b> <b>(75) Inventor/Applicant (for US only):</b> SPEIGHT, Russell, Gordon [AU/AU]; 259-261 Colchester Road, Kilsyth, VIC 3137 (AU). <b>(74) Agent:</b> GRIFFITH HACK; 509 St. Kilda Road, Melbourne, VIC 3004 (AU).		<b>(81) Designated States:</b> AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>With international search report.</i>
<b>(54) Title:</b> AUTOMATED MOLDING TECHNOLOGY FOR THERMOPLASTIC INJECTION MOLDING		
<b>(57) Abstract</b>  A method for the automated optimization of an injection molding machine set-up process comprising injection molding one or more parts, inspecting the parts for defects, adjusting the injection stroke and/or the injection velocity and repeating the process until the defects are reduced. There is also disclosed a method comprising injection molding one or more parts, determining a mean injection pressure profile by measuring the injection pressure with the machine configured with a constant, desired injection velocity. Then the velocity profile is adjusted to reduce differences between the measured pressure and the mean pressure profile. A further method is disclosed wherein the kickback is calculated and adjusted from screw displacement, packing/holding time and pressure. Also disclosed is a method comprising injection molding one or more parts then determining the gate freeze time by incrementing the holding time and measuring the screw displacement.		